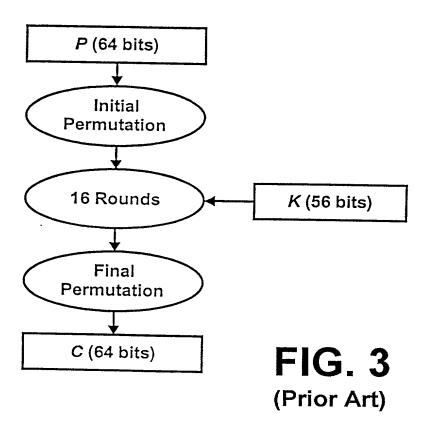
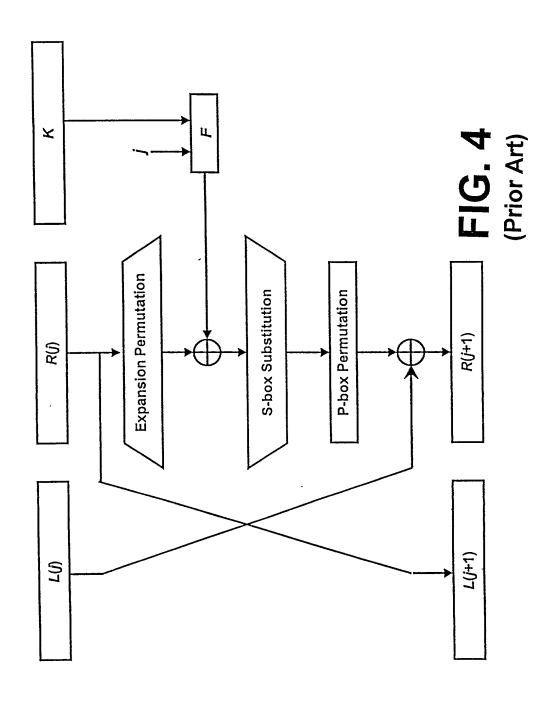
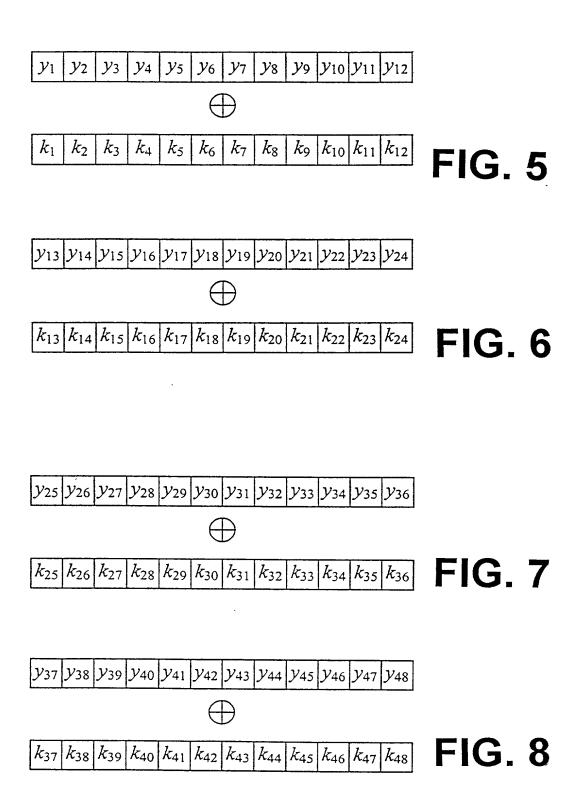


(Prior Art)







| | | $k_1 \mid k_2 \mid k_3 \mid k_4 \mid k_5 \mid k_6 \mid k_9 \mid k_{10} \mid k_{11} \mid k_{12} \mid (k_7 \oplus k_5) \mid (k_8 \oplus k_6) \mid $ FIG. 9 | | | $ k_{13} k_{14} k_{15} k_{16} k_{17} k_{18} k_{21} k_{22} k_{23} k_{24} (k_{19}\oplus k_{17}) (k_{20}\oplus k_{18})$ |
|--|----------|---|---|----------|--|
| 0 | | $(k_8 \oplus k_6)$ | 0 | | $(k_{20} \oplus k_{18})$ |
| 0 | | $(k_7 \oplus k_5)$ | 0 | | $(k_{19} \oplus k_{17})$ |
| 8x 2x 6x | \oplus | $k_{10} k_{11} k_{12}$ | X15 X16 X17 | \oplus | k22 k23 k24 |
| x32 x1 x2 x3 x4 x5 x6 x7 x8 x9 | | ks k6 k9 | x8 x9 X10 X11 X12 X13 X14 X15 X16 X17 | | $k_{17} k_{18} k_{21}$ |
| $x_1 \mid x_2 \mid x_3$ | | k2 k3 k4 | $x_9 x_{10} x_{11}$ | | K14 K15 K16 |
| X32 | | $ k_1 $ | χ_8 | | k ₁₃ |

| | ļ | E D D | [] | | E. TG. 7 |
|---|----------|--|--|----------|--|
| 0 | | $k_{32} \oplus k$ | 0 | | $k_{44} \oplus k_{2}$ |
| 0 | | $k_{25} k_{26} k_{27} k_{28} k_{29} k_{30} k_{33} k_{34} k_{35} k_{36} (k_{31} \oplus k_{29}) (k_{32} \oplus k_{30})$ | 0 | | $k_{37} k_{38} k_{39} k_{40} k_{41} k_{42} k_{46} k_{47} k_{48} (k_{43} \oplus k_{41}) (k_{44} \oplus k_{42})$ |
| x24 X25 | | k35 k36 (| , , , , , , , , , , , , , , , , , , , | (| (c47 K48 (|
| 22 523 5 | \oplus | 33 / 1/34 / | 30 - 231 | \oplus | 45 K46 H |
| 20 X21 X | | 29 k30 k | x 62x 87 | | 41 K42 K |
| x 61x 81 | | 27 K28 K | 26 X27 X | | 39 K40 K |
| X16 X17 X18 X19 X20 X21 X22 X23 X24 X25 | - | 15 K26 K2 | X24 X25 X26 X27 X28 X29 X30 X31 X32 X1 | | 7 k38 k3 |
| प्र | _ | k2 | $\frac{x}{2}$ | | 183 |